

WHAT IS CLAIMED IS:

1. A multi-part intraocular lens (IOL) comprising:
an optic;
a haptic comprising:

at least three contact points for the eye wherein said contact points are at the ends and corner of a "L"-shaped element; and an attachment for the optic onto the haptic.

2. The multi-part intraocular lens of Claim 1, wherein said attachment comprises an eyelet and a cleat.

3. The multi-part intraocular lens of Claim 2, wherein said cleat is a part of said haptic.

4. The multi-part intraocular lens of claim 3, wherein said haptic comprises at least two cleats.

5. The multi-part intraocular lens of Claim 2, wherein said eyelet is a part of said lens.

6. The multipart intraocular lens of Claim 5, wherein said lens comprises at least two eyelets.

7. The multi-part intraocular lens of Claim 1, wherein there are two or more attachments.

8. The multi-part intraocular lens of Claim 1, wherein the two or more attachments are asymmetrical.

9. The multi-part intraocular lens of Claim 1, wherein said haptic further comprises a hinge.

10. The multi-part intraocular lens of Claim 9, wherein said haptic comprises relatively more rigid elements formed of relatively higher modulus material, said relatively more rigid elements separated from one another at a discontinuity; and a relatively less rigid element formed of relatively lower modulus material bridging said discontinuity.

11. The multi-part intraocular lens of Claim 9, wherein said bridged element allows for the relatively more rigid element to be rotationally fit into the anterior chamber.

12. The intraocular lens of Claim 1, wherein said haptic is composed of a higher modulus material selected from the group consisting of: polyimide, polyetheretherketone, polycarbonate, polymethylpentene, polymethylmethacrylate, polypropylene, polyvinylidene fluoride, polysulfone, and polyether sulfone.

13. The intraocular lens of Claim 11, wherein said polyimide is KAPTON.

14. The intraocular lens of Claim 11, wherein said higher modulus material is polyphenylsulfone (PPSU).

15. The intraocular lens of Claim 11, wherein said higher modulus material is about 100,000 to about 500,000 psi/inch.

16. The intraocular lens of Claim 14, wherein said higher modulus material is about 340,000 psi/inch.

17. The intraocular lens of Claim 11, wherein said higher modulus material is less than or equal to about 0.01 inches thick.

18. The intraocular lens of Claim 10, wherein said lower modulus material is an elastomer selected from the group consisting of: silicones, urethane, or hydrophilic acrylics.

19. The intraocular lens of Claim 10, wherein said lower modulus material is about 100 to about 1000 psi.

20. The intraocular lens of Claim 10, wherein said lower modulus material has a hardness of about 15 to 70 A scale.

21. The intraocular lens of Claim 11, wherein said higher modulus material is 60 to 95 shore D.

22. The intraocular lens of Claim 17, wherein said lower modulus material is selected from the group consisting of: NUSIL MED 6600, 6604, 6607, 6400, and 6820 and the like.

23. The intraocular lens of Claim 1, wherein said optic is selected from the group consisting of a refractive lens, an interference lens, a toric lens, a multifocal lens, a positive lens, and a negative lens.

24. The intraocular lens of Claim 1, wherein a lower modulus material partially or completely covers said haptics.

25. The intraocular lens of Claim 1, wherein a lower modulus material is extended toward the tip of said haptic to produce a softer contact point for the eye tissue.

26. The intraocular lens of Claim 1, wherein said lower modulus material is applied by surface treatment and molding.

27. The intraocular lens of Claim 23, wherein said surface treatment is a corona or plasma treatment.

28. The intraocular lens of Claim 23, wherein said molding is selected from the group consisting of dip molding, cast molding, and injection molding.

29. A multi-part "L"-shaped intraocular lens, comprising:

a film haptic with a generally "L" shape;

a separate optic; and

an attachment for said optic to said haptic, wherein said optic can be attached to said haptic within the eye.

30. A method for introducing an intraocular lens haptic into a very small incision in an eye, comprising:

inserting the haptic of Claim 1 into the eye;

inserting a separate optic into the eye; and

attaching said optic onto said haptic.

31. The method of Claim 30 wherein said insertion of said haptic into the eye does not deform said haptic.

32. The method of Claim 30, wherein said optic is formed of a relatively lower modulus material than said haptic.

33. The method of Claim 30, wherein said optic is attached to said haptic with a stretchable attachment, such that said haptic can be separately inserted into the eye and spring back into position.

34. A method of mounting the intraocular lens of Claim 1 in the anterior chamber of an eye, comprising:

inserting said haptic and positioning it at the angle of said anterior

chamber;

attaching said optic onto said haptic within the eye; and

bending said haptic at a preferential hinge line to reduce pressure against said angle.

35. A multipart IOL comprising:
a rigid, non-foldable haptic; and
a foldable optic.

36. The IOL of claim 35 wherein said optic is attached to said haptic at one point and can be folded around said haptic for insertion.

37. The IOL of claim 35 wherein said optic is attached to said haptic with a stretchable attachment, such that said haptic can be separately inserted into the eye and spring back into position.

38. A haptic comprising a material which will support an optic, wherein said haptic will pass through a two mm incision without deformation.

39. The haptic of Claim 38 wherein said haptic has an "L" or "L" shape.

40. An attachment for a two-part IOL comprising: a cleat on one part of said two-part IOL; and an eyelet allowing said cleat to firmly attach on said second part of said two-part IOL.

41. The attachment of Claim 30 wherein said cleat is on the haptic portion of said two-part IOL.

42. A haptic for an intraocular lens, comprising:
a first leg, having a maximum cross sectional width less than 2.0 mm, extending from a first free end to a second end;

a second leg having a maximum cross sectional width less than 2.0 mm, joined to said first leg at said second end, and extending from said second end of said first leg to a second free end of said second leg; and

a joint connecting said first and second legs at said second end of said first leg, said joint having a maximum cross sectional width less than 2.0 mm.

43. A haptic for an intraocular lens, comprising:
an optic-mounting frame configured to pass without deformation completely through a 2.5 mm opening.

44. A haptic for an intraocular lens, comprising:

A frame which defines a pair of mounting locations for an optic, which locations straddle an open, optic-receiving region, said frame configured as a single, narrow, meandering element having a maximum width along its length of less than 2.0 mm.

45. A method of inserting a haptic into a patient's eye, comprising:

5 threading said haptic through an incision smaller than 2.0 mm into said eye, without bending said haptic about an axis parallel to its length.

ADD
B8